



## SAMPLE MATERIAL

### Lesson Plan: Subtracting a Fraction from a Whole

KIPP DC: Key Academy, Washington, D.C.

**Topic:** National Math Panel: Critical Foundations for Algebra

**Practice:** Mathematics Preparation for Algebra

The KIPP lesson plan approach is illustrated using the same lesson that Meghan Little demonstrates and discusses in the related media item. The goal of the lesson is for students to learn to subtract fractions from whole numbers by converting wholes to fractions equivalent to one.

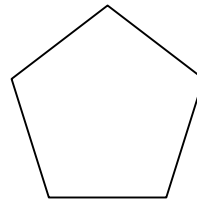
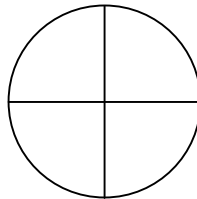
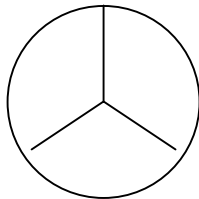
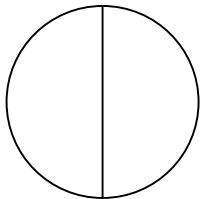
The teacher's questions to students are included along with her notes and demonstration examples as well as the aim for the lesson and worksheet examples for guided practice. Also included are the Show Off and the "test" examples that the teacher uses as a formative assessment at the conclusion of the lesson..

<b>KIPP DC: Key Academy</b> <b>Meghan Little, 5<sup>th</sup> Grade Teacher</b> <b>Math Lesson Plan: Fractions</b>	
<b>Aim</b>	<b>We will be able to subtract fractions from whole numbers by converting wholes to fractions equivalent to 1</b>
<b>Agenda</b> <ul style="list-style-type: none"> <li>• Do Now</li> <li>• HW Check</li> <li>• Can you give me <math>\frac{1}{4}</math> of your pizza?</li> <li>• Magic 1!!!!!!</li> <li>• Multiplication practice</li> </ul>	Graphing                      expanded form Average                      simplifying fraction equal to 1
	Check PS 51, Assign Ms L PS
	Pass out paper plates to each table (As they are clicking away HW and student is collecting packets) This is your pizza... How many pizza's do you have? I want $\frac{1}{4}$ ? If you have 1 pizza and you give me $\frac{1}{4}$ , how much pizza will you have left?  <i>Do it. Then write the MATH problem you did on the bottom of your DO NOW</i> Students share out their answers. What did you get? How? Why? Review the math problems they wrote.  So if I have 1 whole, how do I take a fraction away???  Why?
	<b>Notes</b> Let's review WHY that works... <i>Pass out magic one notes</i> What fractions does one whole equal?  Turn to 1 into a fraction! You can turn it into ANY fraction you want. But, what would make sense to turn it into? One that speaks the same language! Let's try it with our fraction pieces...  Can you make 1 into $\frac{4}{4}$ ? YES! Okay, so instead of writing 1, let's write $\frac{4}{4}$ ! Now, can't I make $\frac{4}{4} - \frac{1}{4}$ ?  Notes: SUBTRACTING A FRACTION FROM ONE 1) Change the 1 into a fraction. 2) Give it the same denominator as the fraction 3) Subtract  Ex 1: $1 - \frac{1}{3}$ Ex 2: $1 - \frac{3}{5}$ Let them complete Ex 3-5
	2 on back of our problem solving points!
<b>Show off!</b>	Try These from the board (A-D) $1 - \frac{2}{10}$ , $1 - \frac{3}{5}$ , Compare $\frac{4}{4}$ O 1, $1 - \frac{2}{9}$ <i>Pass out Books while students complete the Show Offs</i>

Today's challenge:

Can we subtract a **fraction** from  
one whole???

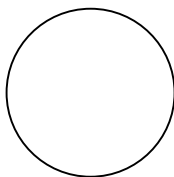
How much is ONE WHOLE??



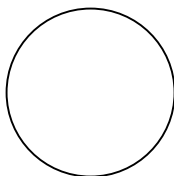
ONE =

Put the **MAGIC ONE** to work!!!

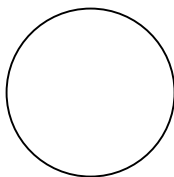
$$1 - \frac{1}{4} =$$



$$1 - \frac{1}{3} =$$



$$1 - \frac{1}{2} =$$



**AIM:** \_\_\_\_\_

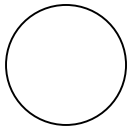
**To subtract a fraction from 1:**

1) \_\_\_\_\_ the **1** into a \_\_\_\_\_ that equals **1**!

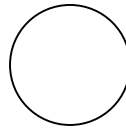
Give it the same \_\_\_\_\_ as the fraction in the problem

2) Subtract!

**Ex 1:**



**Ex 2:**



**Ex 3:**

**Ex 4:**

**Ex 5:**

**Ex6:**

**Try These!!**

A)

B)

C)

D)

**SHOW OFF!!**

1) Write a fraction equal to 1, with a denominator of 15:

$$1 = \underline{\hspace{2cm}}$$

$$2) 1 - \frac{2}{9} =$$

$$3) 1 - \frac{3}{10} =$$